

MUKHLENOV, I.P.; TUMARKINA, Ye.S.; KIL'SHTEKT, K.K.; KHALEPY, V.M.;  
NIKITINA, L.F.

Removing the sulfuric acid fog. Trudy ITI no.54:103-116 '59.  
(MIRA 13:8)

(Sulfuric acid)

(Gases--Purification)

POZIN, M.Ye.; KOPYLEV, B.A.; NIKITINA, L.F.; DMITREVSKIY, B.A.

Possibility of reducing the consumption of dilute nitric acid  
in the decomposition of phosphates. Zhur.prikl.khim. 35 no.6:  
1184-1191 Je '62. (MIRA 15:7)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.  
(Phosphates) (Nitric acid)

POZIN, N.Ye.; KALYAN, I.A.; M...T, I.Ya.; NIKITINA, L.S.; DMITRIEV, N.A.

Improvement of the complex fertilizer production at the Novomoskovsk  
Chemical Combine. Zhur. prikl. khim. 37(1964):208-213. ...  
(VIAA 17:1).

I. Leningradskiy tekhnologicheskiy institut imeni Lensoveta,  
Novomoskovskiy khimicheskiy kombinat.

BELJGIN, A.A.; NIKITINA, L.F.

Scientific session of the Sverdlovsk Scientific Research Institute  
of Physical Therapy. Vop.kur.fizioter. i lech.fiz.kul't. 21 no.3:  
88-94 J1-S '56. (MLRA 9:10)  
(PHYSICAL THERAPY)

NIKITINA, L.F.

Dynamics of cardiovascular reactions in treating hypertension  
with Lipovka radon water. Vop.kur.fizioter. i lech.fiz.kul't.  
23 no.1:37-42 '58. (MIRA 11:3)

1. Iz Sverdlovskogo nauchno-issledovatel'skogo instituta fiziche-  
skikh metodov lecheniya (dir. - kandidat meditsinskikh nauk N.V.  
Orlov, nauchnyy rukovoditel' - prof. D.G.Shefer)  
(RADON--PHYSIOLOGICAL EFFECT) (HYPERTENSION)

NIKHTINA, L. F.: Master Med Sci (diss) -- "The dynamics of cardiovascular reactions in patients with hypertension in the process of treatment with radon baths from the Lipovskiy spring". Sverdlovsk, 1959. 19 pp (Min Health RSFSR, Sverdlovsk, State Med Inst), 200 copies (IL, No 12, 1960, 129)

15-1957-3-2605

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 3, p 6 (USSR)

AUTHORS: Bublichenko, N. L., Nikitina, L. G.

TITLE: The Tarkhanskiy Section (Southwestern Altay) [Tarkhanskiy razrez  
(Yugo-Zapadnyy Altay)]

PERIODICAL: Tr. Altaysk. gorno-metallurg. n.-i. in-ta AN KazSSR, 1955,  
Vol 2, pp 5-25

ABSTRACT: The Devonian and Carboniferous section of the Emeinogorsko-Tarkhanskiy belt of southwestern Altay is described in detail (see Table). According to the author, the fossils in the Tarkhanskaya svita (series) are carboniferous, although Devonian forms are also present. The following Carboniferous forms are found in the lower part of the Tarkhanskaya series: Linoprotodus aff. ovatus Hall., Plicatifera orthomastia sp. n., Productus minax subgen. and sp. n., and others. The Devonian forms present are Cyrtospirifer kureki Bubl. and Tylothyris mesacostalis Hall. The upper boundary of the Tarkhanskaya series is determined by the disappearance of Cyrtospirifer kureki and the appearance of Spirifer tornacensis Kon.

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15-1957-3-2605

## The Tarkhanskiy Section (Southwestern Altay) (Cont.)

The boundary between the Bukhtarminskaya and Ul'binskaya series is based on the abundant appearance of bryozoans in the Bukhtarminskaya series and the disappearance of other organisms. The Maloul'binskaya series is correlated with the Mazurovskaya series of the Kuzbas (Kuznetsk Basin) on the basis of plant remains. The Middle Devonian rocks of the Tarkhanskaya and Maloul'binskaya series are characterized by their transgressive relationships.

Namurian stage	Maloul'binskaya series. Continental sediments, consisting of siltstones with <u>Angaropteridium cardiopterooides</u> ; up to 1000 m thick.
Visean stage	Ul'binskaya series. Siltstones and limestones with bryozoans <u>Polypora sibirica</u> , brachiopods <u>Productus ex. gr. pinguis</u> and others; 300-400 m thick.

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15-1957-3-2605

## The Tarkhanskiy Section (Southwestern Altay) (Cont.)

TOURNASIAN STAGE	TARKHANSKAYA SERIES	
		Bukhtarminskaya series. Limestones with <u>Spirifer tornacensis</u> and others; about 100 m thick.
		Tarkhanskaya subseries. Retoporinal beds, siltstones with <u>Retoporina altaica</u> and others, brachiopod layers, siltstones with <u>Spirifer iulii</u> and others; 580 m thick.
		Subseries of detrital shales. Yellowish-green siltstones 280 m thick.
		Subseries of sandstones. Interbedded coarse-grained sandstones and shales; remains of <u>Linoprotodus aff. ovatus</u> , <u>Cyrtospirifer kureki</u> , and others; 28-29 m thick.
		Subseries of basal conglomerates. Pebbles formed from underlying volcanic rocks; up to 59 m thick.

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15-1957-3-2605

## The Tarkhanskiy Section (Southwestern Altay) (Cont.)

Upper Devonian	Series of basic and intermediate volcanics. Augite porphyrites and their tuffs; 700 m thick.
Middle Devonian	Series of acid volcanics with Nikolayevskiy beds at the base. Quartz keratophyres and their tuffs; limestones at the base with goniatites; 1200-1800 m thick.
Lower Silurian (?)	Metamorphic greenstones

Card 4/4

K. A. K.

SHCHERBA, G.N.; YERMOLAYEV, K.Ye.; KAYUPOV, A.K.; KIM, V.A.; NIKITINA, L.G.;  
FLEROV, Ye.A.; SATPAYEV, K.I., akademik, red.; BOK, I.I., red.;  
SEMENOVA, M.V., red.; POPOV, N.D., tekhn.red.

[Geology of the Leninogorsk and Zyryanovsk mine regions in the Altai Mountains] Geologija Leninogorskogo i Zyrianovskogo rudnykh polei na Altay. Pod red.K.I.Satpaeva. Moskva, Gos. nauchno-tehn.izd-vo lit-ry po geoli okhrane nedr. 1957. 370 p. (MIRA 11:1)

1. Akademiya nauk Kazakhskoi SSR, Alma-Ata.  
(Kazakhstan--Geology, Structural)

NIKITINA, L. G. Cand Geol-Min Sci -- (diss) "Dike rocks of the Zyryanovskiy ore region of the Altay. (Structural position, petrography, metamorphism, and ~~the~~ relationship to mineralization)." Alm-Ata, 1957. 12 pp (Acad Sci Kazakh SSR. Inst of Geol Sci), 100 copies (KL, 44-57, 99)

-11-

NIKITINA, L.G.

Some data on the geology of dike rocks in the Zyryanovsk District  
of Rudnyy Altai, Izv. AH Kazakh SSR, Ser. geol. no.2 28-41 '57.  
(Zyryanovsk District--Dikes (Geology)) (MLRA 10:3)

NIKITINA, L.G.

Contact hydrothermal and metasomatic changes in dikes of basic  
and intermediate composition in the Zyryanovsk ore region in  
the Altai. Izv.AN Kazakh.SSR.Ser.geol. no.4:3-19 '58.

(MIRA 12:4)

(Zyryanovsk region--Rocks, Igneous) (Metasomatism)

NIKITINA, L.G.

Geology of the Devonian volcanic structure of the Mashan Mountains  
in the Chingiz-Tau. Izv. AN Kazakh. SSR. Ser. geol. no.3:27-40  
'59. (MIRA 13:12)

(Chingiz-Tau--Volcanoes)

SOKOV, Yu.F.; NIKITINA, L.G.

Economic effectiveness of catalytic reforming units with a  
platinum catalyst. Khim. i tekhnicheskaya promst. no.7:31-34  
Jl '61. (MIRA 14:6)

1. Bashkirskiy nauchno-issledovatel'skiy institut po pererabotke  
nefti.

(Petroleum--Refining)  
(Platinum)

KAYUPOV, A.K.; NIKITINA, L.G.; SHLYGIN, A.Ye.

Alteration of enclosing rocks of the Paryginskoye deposit  
(Rudnyy Altai). Izv. AN Kazakh. SSR. Ser. geol. no. 1:40-51  
'62. (MIRA 15:5)  
(Altai Mountains—Petrology)

SOKOV, Yu.F.; NIKITINA, I.G.

Economic efficiency of catalytic-reforming units with platinum catalysts. Trudy Bash NIINP no.5:99-104 1962. "MIFK 1" 1969

Using an alumino-platinum catalyst under plant conditions. Itin. 104  
1969

L-50546-65 EWT(n)/EPP(c)/EWP(j)/T PC-4/PR-4 RM  
ACCESSION NR: AP50154,65

UR/0318/d/000/010/0035/0038

26

25

3

AUTHOR: Liakumovich, A.G.; Michurov, Yu. I.; Nikitina, L.G.

TITLE: Polymerization of isobutylene in the process of its absorption by sulfuric acid

SOURCE: Neftepererabotka i neftkhimiya, no. 10, 1964, 35-38

TOPIC TAGS: ethylene, isomer, polymerization, chemical absorption, sulfuric acid

Abstract: Investigations were conducted to determine the effect of different concentrations of sulfuric acid and temperatures on the speed of polymerization of isobutylene in the course of the absorption of the latter by the acid. The method of investigations used was as follows: isobutylsulfuric acid, prepared from sulfuric acid of a given concentration and isobutylene, was maintained at a desired temperature for a period of time; it was then quickly cooled to minus 10 degrees and placed into a centrifuge to separate the polymers from the acid phase; the acid content was then determined and the remaining isobutylene concentration in the acid was calculated. The data indicate that the absolute speed of the polymerization of isobutylene absorbed by sulfuric acid bears no relation to the content of the preparation in the acid, and is

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L 50546-65

ACCESSION NR: AP5015465

not affected by different temperatures and acid concentrations. Further investigations revealed that a rise in the temperature for the intensification of the absorption process is permissible if the concentration of the acid and the period of contact of phases are decreased, and the acid saturation with isobutylene is increased. Orig. art. has 4 graphs and 1 table.

ASSOCIATION TANIL Sterlitamakskogo zavoda SK (TANIL Sterlitamakskiy Plant SK)

SUBMITTED: OO

ENCL: OO

SUB CODE: FP, GC

NO REF SOV1 008

OTHER: 000

JPRS

*Mem*  
Card 2/2

L 45750-65 EWT(m)/EWP(j) PC-4 RM  
ACCESSION NR: AP5014795

UR/0318/64/000/012/0035/0037

AUTHOR: Liskumovich, A. G.; Michurov, Yu. I.; Nikitina, L. G.

TITLE: Equilibrium distribution of isobutylene between hydrocarbons and sulfuric acid

SOURCE: Neftepererabotka i neftekhimiya, no. 12, 1964, 35-37

TOPIC TAGS: isomer, ethylene, hydrocarbon, sulfuric acid, gas mechanics

Abstract: The equilibrium distribution of isobutylene between  $H_2SO_4$  (at concentrations of 50, 57.3, and 65% by weight) and 92-96% butane at 10-50° was studied. The content of isobutylene in the hydrocarbon gas phase increased with increasing temperatures. At amounts of absorbed isobutylene less than 1 mole per mole of acid, the equilibrium content of isobutylene in the hydrocarbon gas phase increased with decreasing concentrations of acid; at amounts of absorbed isobutylene greater than 1 mole per mole of acid, this relation was reversed and the content of isobutylene in the gas phase increased with increasing acid concentrations. The curve expressing the equilibrium content of isobutylene in the gas phase in relation to absorption in  $H_2SO_4$  showed a sharp inflection and steep rise at 1.4-1.8 moles.

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L 45750-65

ACCESSION NR: AP5014795

isobutylene absorbed per 1 mole of acid for 65%  $H_2SO_4$ ; the point of inflection was not reached for the lower  $H_2SO_4$  concentrations studied. Similar

equilibrium relations were found to apply to the  $C_5H_{12} - i-C_6H_{10} - H_2SO_4$  system. The data obtained correspond with a sufficient degree of accuracy to the equation  $y = Ax^n$ , where  $x$  and  $y$  are equilibrium concentrations of isobutylene in the acid and hydrocarbon phase, respectively. For 65%  $H_2SO_4$ , this equation applies up to the point of inflection only.

Orig. art. has 5 graphs.

ASSOCIATION: Sterlitamakskiy zavod SK (Sterlitamak Plant SK)

SUBMITTED: OO

ENCL: OO

SUB CODE: OC, GC

NO REF SOV: 001

OTHER: 002

JPRS

63 JG  
Card 2/2

NIKITINA, L.G.

Stratigraphy and facies complexes of Lower and Middle Devonian  
sediments in the northeastern part of central Kazakhstan. Izv.  
AN Kazakh SSR. Ser. geol. nauk 21 no. 6:17-37 N-D 164.

1. Institut geologicheskikh nauk im. K.I. Satpayeva AN KazSSR,  
Alma-Ata.

M.RA 12.1.

LYALIN, Yuriy Iosifovich; MILLER, Yelena Yevgen'yevna; MIKITINA, Lidiya  
Grigor'yevna; BORUKAYEV, R.A., akademik, otd. red.

[Volcanic formations of the Chingiz geoanticlinorium (central  
Kazakhstan)] Vulkanogennye formatsii Chingizskogo geoanticlini-  
noriiia (TSentral'nyi Kazakhstan). Alma-Ata, Nauka, 1974. 165 p.  
au (Akademija nauk Kazakhskoi SSR. Institut geologicheskikh  
nauk. Trudy, vol.11).

(MIRA 18:1)

1. AM KazSSR (for Borukayev).

DCHKAROV, V.I., kand. geol.-miner. nauk; NIKITINA, L.G., kand. geol.-miner. nauk; SHAIKOV, S.M., kand. geol.-miner. nauk; EYDINOV, N.M., st. inzh.; GLORONOV, G.I., inzh.; PERLIK, G.P., inzh.; BANDALETOV, S.M., kand. geol.-miner. nauk; VLADIMIROV, N.M., kand. geol.-miner. nauk; SAIYKOV, A.M., kand. geol.-miner. nauk; MALYSHEV, Ye.G., ml. nauchn. sotr.; BEKKALIYEV, N.A., st. inzh.; EYLINOV, Yu.I., st. inzh.; MUKHAMEDZHANOV, S.M., kand. geol.-miner. nauk; ISABAYEV, T.T., st. inzh.; MOTOV, Yu.A., inzh.; KOLYGIN, N.P., kand. geol.-miner. nauk; LAFILUS, Zh.D., inzh.; SHOYMANOVA, M.M., inzh.; YARSHOV, G.S., inzh.; RUMYANTSEV, A.V., kand. miner. nauk [deceased]; MIKHAYLOV, B.P., st. inzh.; SATPAYEV, K.I., akademik, glav. red. [deceased]; MEDOYEV, G.T.S., otd. red.; DMITROVSKIY, V.I., red.; SEMENOV, I.S., red.; BRAJLOVSKAYA, M.Ya., red.; KOROLEVA, N.N., red.

[Irtysh-Karaganda Canal; engineering geological condit. ...]  
Kanal Irtysh - Karaganda; inzhenerno-geologicheskie usloviya.  
Alma-Ata, Nauka, 1965. 168 p. (MIAA 1245)

(Continued on next page)

NIKITINA, L.G.; AKSAMENTOVA, N.V.

Devonian volcanic formations. Trudy Inst. geol. na R. Kazakh.  
SSP 13:209-250 1965.

NIKITINA, L.I.; VASIL'YEVA, S.F.

Incompatible and intricate medicinal prescriptions. Apt.  
delo 12 no.4:90-91 Jl-Ag '63. (MIRA 17:2)

1, TSentral'nyy aptechnyy nauchno-issledovatel'skiy institut.

ARTEM'YEV, A.I., nauchnyy sotrudnik; BUL'VAROVA, Z.I. nauchnyy sotrudnik;  
VASIL'YEV, S.F., nauchnyy sotrudnik; NIKITINA, L.I. nauchnyy sotrudnik

Answers to questions on the preparation of medicinal forms presenting difficulties and incompatibilities in compounding. Apt. delo 11 no.1:  
92-95 Ja-F '62. (MIA 15:4)

1. Laboratoriya tekhnologii lekarstvennykh form i galenovykh preparatov  
TSentral'nogo nauchno-issledovatel'skogo aptechnogo instituta.  
(INCOMPATIBLES (PHARMACY))

ARTAMONOV, K.I.; LEBEDEV, N.I.; YERGALIYEV, E.Ye.; LESECHKO, A.K.;  
YAKUSHIN, M.V.; KAZAKOV, V.N.; BRYUKHANOV, N.G.; NIKITINA, L.I.;  
KHVESYUK, F.I.; Prinimali uchastiye Matveyev, A.T.; Kovalev, D.I.;  
ROMANOV, V.S.; MARCHENKO, B.P.; ZUDOVA, T.I.; OMAROV, M.M.;  
PECHENKIN, S.N.; LUKIN, Ye.G; KHLUDKOV, V.I.

Shaft-furnace copper smelting with an oxygen-enriched blow.  
TSvet. met. 34 no.3:32-39 Mr '61. (MIRA 14:3)

1. Irtyshskiy polimetallichесkiy kombinat (for Artamonov, Lebedev,  
Yergaliyev, Lesechkо, Matveyev, Kovalev, Romanov, Marchenko, Zudova,  
Omarov). 2. Vsesoyuznyy nauchnoissledovatel'skiy institut tsvetnykh  
metallov (for Yakushin, Kazakov, Bryukhanov, Nikitina, Khvesyuk,  
Pechenkin, Lukin, Khludkov).

(Copper—Metallurgy) (Oxygen—Industrial applications)

YAKUSHIN, M.V.; BRYUKHANOV, N.G.; KAZAKOV, V.N.; NIKITINA, L.I.; KHVESYUK, F.I.; PECHENKIN, S.N.; ARTAMONOV, K.I.; LEBEDEV, N.I.; MATVEYEV, A.T.; KOVALEV, S.I.

Converter treatment of complex metal mattes with an oxygen enriched blow. TSvet.met. 34 no.10:34-39 O '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnykh metallov (for Yakushin, Bryukhanov, Kazakov, Nikitina, Khvesyuk, Pechenkin).
2. Irtyshskiy polimetallichесkiy kombinat (for Artamonov, Lebedev, Matveyev, Kovalev).

(Nonferrous metals--Metallurgy) (Converters)

NIKITINA, L.I.

Efficiency of the various alternates of open-hearth smelting  
with an increased oxygen feed, Sbor, trud, Otd, tekhn.-ekon.  
issl. TSNIICHM no. 1:34-42 '63. (MIRA 17:6)

S/137/63/000/002/016/034  
A006/A101

AUTHORS: Yakushin, M. V., Bryukhanov, I. G., Nikitina, L. I., Khvesyuk, F.I.

TITLE: The use of oxygen at the Irtysh copper-melting plant

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1963, 35, abstract 20185  
("Sb. tr. Vses. n.-i. gornometallurg. in-t tsvetn. met.", 1962,  
no. 7, 62 - 77)

TEXT: At the Irtysh copper-melting plant O<sub>2</sub>-enriched blast is used in shaft melting and converting. With a higher O<sub>2</sub> content in the blast the output of the shaft furnaces per 1 nm<sup>3</sup> of blast increases and is at a constant 23.75% O<sub>2</sub> in the blast as high as 117.5%, at 25.2% O<sub>2</sub> - 129.6% and at 27.3% O<sub>2</sub> - 156.8%. In converting, the increased O<sub>2</sub> content in the blast up to 23.3% raises the efficiency of the converter's per 1 hour blast by 20% and per 1 hour operation by 14 - 15%. At a 25.3% O<sub>2</sub> in the blast, the efficiency of the converter per 1 hour blast increases by 37 - 40% and per 1 hour operation by 23 - 25%. The temperature of exhaust gases in the shaft furnace decreases from 590 to 320°C (at 27.3%).

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The use of oxygen at the Irtysh copper-melting plant

S/137/63/000/002/016/034  
A006/A101

O<sub>2</sub>). The output of cyclone dust in the use of blast enriched with O<sub>2</sub>, decreases by 15 - 20%. The scum formation in the tuyere zone and the furnace top is reduced. There are 10 references.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2

NIKITINA, I. I.; RABITNOVA, K. I.; SOKOLOV-KATEV, G. N.

Queristants interviewed in the Central Laboratory of the Institute  
of Chemistry. Address: 14 no. 3, 9, 10, M-14P 165.

(MIA 1941)

AL'TSHULER, V.Ye., prof.; NIKITINA, L.L., starshiy laborant; KOLOBOVA, V., zootehnik; TIKHOMIROVA, Ye., zootehnik

Checking standards for the judging of bulls based on various numbers of daughters. Sbor. nauch. trud. Ivan. sel'khoz. Inst. no.19:92-100 '62.

(MIRA 17:1)

1. Kafedra razvedeniya sel'skokhozyaystvennykh zhivotnykh i molochnogo dela (zav. - prof. V.Ye. Al'tshuler) Ivanovskogo sel'skokhozyaystvennogo instituta.

BUL'VAROVA, Z.I.; NIKITINA, L.I.; SAMSONOVA, M.N.; NABOKOV, Yu.S.

Study of the regimen of sterilizing oils, vaseline and lanolin  
with steam under pressure. Apt. devo 12 no.2:28-35 Mr-Ap '63,

(MIRA 17:7)

1. Laboratoriya tekhnologii lekarstvennykh form i galenovykh  
preparatov TSentral'nogo aptechnogo nauchno-issledovatel'skogo  
instituta i Kafedra mikrobiologii farmatsevticheskogo fakulteta  
I Moskovskogo ordena lenina meditsinskogo instituta imeni I.M.  
Sechenova.

KHROMOV, S. I.: PIK, YE. I.: AKISHIN, P. A.: NIKITINA, L. M.

Ethylcycloheptane

Contact transformation of ethylcycloheptane in the presence of platinized carbon.  
Vest. Mosk. un 7 No. 2 1952.

9. Monthly List of Russian Accessions, Library of Congress, October, 1952, p. 55. Unclassified.

NIKITINA, L. N.

"Investigation of the Process of Drying Mill and Part in a Inertic Steam Dryer." Cand Tech Sci, Department of Physicochemical and Technical Sci, Acad Sci Belorussian SSR, 20 Nov 54. (SB, 8 Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SC: Sum. No. 521, 2 Jun 55

NIKITINA, L.M.

Investigation of the process of drying milled peat in a combination  
steam and pneumatic dryer. Trudy Inst.energ.AN BSSR no.2:178-188  
'55. (MLRA 9:8)

(Peat--Drying) (Drying apparatus)

NIKITINA L.P.

4

✓ Bitumens Bitumens in the Minusinsk basin. M. N. Sokolova, G. V. Mirdikov, and I. M. Nikitina. Doklady Akad. Nauk S.S.R. 102, 1181-1185 (1955); cf. Kurnakov, et al., C.A. 51, 82221. Samples of bitumen taken at distant points in the Minusinsk basin were septd. into fractions: "light hydrocarbons" (I) with uniform properties ( $d_{4}^{20}$  0.8058-0.7913,  $n_{D}^{20}$  1.4493-1.4410, m. 43.5-48 and 53.5-68°, and av. mol. wt. 892), "dark hydrocarbons" (II), and tar (III) sol. in 2% NaOH. The components of II and III vary from pure hydrocarbon to humic substances; the C/H ratio decreases and O and N increase. With some of the components C/O = 1 and C/N = 2. Sapone. of I yields 25.5% of H<sub>2</sub>O-sol. fatty and oxy acids; 08.3% remains unreacted. Sapone. of II results at first in an increase of fatty acids, depending on the hydrocarbon content, up to 61.7 and 69.5%, and then a decrease to 25.3% whereas the proportion of unsaponifiables decreases continuously 68.3 → 18.27 → 3.27 → 1.7% and the H<sub>2</sub>S-sol. increases. NH<sub>3</sub> is evolved. Heating II with HCl ( $d$ . 1.06) results in furlur which with AcOH forms colored substances with an absorption band (iso-AmOH solns.) at 527-556 Å nm. Spectroscopic examn. of III indicates the presence of simple pyrrole compds. Dry samples on aging in the lab. lost 4.2% of the hydrocarbons after 12 years; in 1st samples lost 17% after 2 years; the proportion of II and III increased simultaneously. The excessive increase of N (4.25%) cannot be accounted for by atm. N and suggests the presence of an internal source of N. It appears that the formation of bitumens in this basin is of recent origin. [Signature] (2)

Petroleum Inst. AS USSR

USSR  
CULTIVATED PLANTS GRAINS M  
Sov. Acad. Sci. ZAGORODNI, TVER, NO. 40  
Author: Lyuboshyna, L.; Nikitina, L.  
Institut: AS Belorussii  
Title: The Drying and Pre-Sowing Heating of Corn Seeds in  
a Pneumatic Gas Grain Drier  
Pub. Org.: Izv. AN PSUR, Ser. fiz.-tekhn. n., 1957, no. 2,  
Abstract: No abstract

Page: 1/1

NIKITINA, L.M., kand.tekhn nauk

Moisture exchange in a layer of polydispersed material. Trudy  
Inst.energ.AM BSSR no.3:128-135 '57. (MIRA 12:1)  
(Peat--Drying)

NIKITINA, L.M.

Thermodynamic characteristics of the transfer of matter in certain  
grain crops. Dokl. AN BSSR 3 no.4:157-160 Ap '59.  
(MIRA 12:10)

1. Predstavлено академиком АН БССР А.В. Лыковым.  
(Grain) (Mass transfer)

NIKITINA, L.M.

Results of testing of a milled peat dryer with separation  
of coarse particles. Trudy Inst.energ.AN BSSR no.10:  
46-55 '59. (MIRA 13:6)  
(Peat--Drying)  
(Drying apparatus--Testing)

GUSAROV, V.N.; NIKITINA, L.M.; Prinimala uchastiye PARFENOVА, G.F.,  
starshiy mekhanik

Choice of an experimental scale for determining the matter transfer  
potential. Trudy Inst. energ. AN BSSR no.11:3-11 '60.  
(MIRA 14:9)  
(Heat--Transmission) (Mass transfer)

NIKITINA, L.M.; KUCHMEL', M.A.; Prinimali uchastiye: PARFENOVA, G.F.,  
starshiy mekhanik; SHKRABATOVSKAYA, T.F., starshiy mekhanik

Mass capacity and the mass transfer coefficient of certain  
granular materials. Inzh.-fiz. zhur. 5 no.8:48-52 Ag '62.  
(MIRA 15:11)

1. Energeticheskiy institut AN BSSR, Minsk.  
(Mass transfer) (Grain)

NIKITINA, Lidiya Mikhaylovna; LYKOV, A.V., akademik, red.;  
RUSHOV, A.A., red.

[Tables of equilibrium specific moisture content and the  
binding energy between moisture and materials] Tablitsy  
ravnovesnogo udel'nogo blagosoderzhaniia i energii sviazi  
vlagi s materialami. Moskva, Gosenergoizdat, 1963. 175 p.  
(MIRA 18:8)

1. AN Belorusskoy SSR (for Lykov).

NIKITINA, L.M.

Determination of the mass-transfer potential. Inzh.-fiz. zhur.  
6 no.4:67-70 Ap '63. (MIRA 16:5)

1. Institut teplo- i massoobmena AN BSSR, Minsk.  
(Mass transfer) (Drying)

NIKITINA, L.M.

Chemical potential of mass transfer in capillary-bound moisture.  
Inzh.-fiz. zhur. no.12:40-43 D '63. (MIRA 17:2)

1. Institut teplo- i massoobmena AN BSSR, Minsk.

NIKITINA, L.M.

Determining the transfer potential of osmotically bound  
moisture. Inzh.-fiz. zhur. 6 no.11:52-55 N '63.  
(MIRA 16:11)

1. Institut teplo- i massoobmena AN BSSR, Minsk.

NIKITINA, L.M.

Determining the moisture bound by adsorption in a monomolecular layer. Dokl. AN BSSR 7 no.5:324-325 My '63. (MIRA 16:12)

1. Institut teplo- i massobmena AN BSSR. Predstavleno akademikom AN BSSR A.V. Lykovym.

NIKITINA, L.M.; KUCHMEL', M.A.; Prinimali uchastiye: PARFENOVA, G.F.,  
starshiy mekhanik; Chkrabatovskaya, starshiy mekhanik

Coefficients of mass transfer in layers of certain materials.  
Dokl. AN BSSR 7 no.6:382-383 Je '63. (MIRA 16:10)

1. Institut teplo- i massoobmena AN BSSR. Predstavлено  
академиком AN BSSR A.V. Lykovym.

NIKITINA, L.M.; LYKOV, A.V., akademik, red.

[Tables of mass transfer coefficients for moist materials]  
Tablitsy koeffitsientov massoperenosa vlaghnnykh materialov.  
Pod red. A.V.Lykova. Minsk, Izd-vo "Nauka i tekhnika,"  
1964. 136 p. (MIRA 17:5)

1. Akademiya nauk Bel.SSR (for Lykov).

NIKITINA, L.M.

Determining the experimental potential of mass transfer. Dokl.  
AN BSSR 8 no. 1:36-38 Ja '64. (MIRA 17:5)

1. Institut teplo-i massoobmena AN BSSR. Predstavleno akademikom  
AN BSSR A.V. Lykovym.

NIKITINA, L. M.

"Thermodynamic parameters of mass transfer in capillary-porous bodies."

paper submitted but not accepted for 3rd Symp on Thermophysical Properties,  
Lafayette, Ind, 22-26 Mar 74.

Heat & Mass Transfer Inst, Minsk, BSSR.

NIKITINA, L.M.

Energy of the moisture bond and the mass transfer potential in  
a hygroscopic region. Dokl. AN BSSR 8 no.4:226-227 Ap '64.  
(MIRA 17:6)

1. Institut teplo- i massoobema AN BSSR.

L-3006-66 EWT(d)/EWT(m)/EWP(w)/EPF(c)/ENA(d)/T/EWP(t)/EWP(e)/EWP(b) IJP(c)

ACC NR: AP5025592 MJW/JD/WB/DJ

UR/0129/65/000/010/0019/0022  
621.785.53: 295

51

50

B

AUTHOR: Novikova, Ye. N.; Gurevich, S. I.; Mikitina, L. M.

TITLE: Suitability of nitrided VT14 alloy as a gear material

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 10, 1965, 19-22, and top half of insert facing p. 24

TOPIC TAGS: titanium alloy, nitriding, metal friction, wear resistance, transmission gear !!

ABSTRACT: The VT14 titanium alloy (4.3% Al, 3.22% Mo, and 6% V) in thermally hardened state (water quenching from 860°C and aging at 500°C for 16 hr) displays an ultimate strength of 115 kg/mm<sup>2</sup> and a plasticity of 20%. Like all the other titanium alloys, however, the VT14 displays low antifriction properties, and hence it must be surface-hardened (i.e., in this case, nitrided) before it can be used as the material of friction couplings. The nitriding is performed in a flow of purified N<sub>2</sub> at 850-950°C. Experiments with rollers and gears produced from hot-rolled rods of nitrided VT14 alloy (the hot deformation began at 1050°C -- monophase region -- and ended at 950°C, which corresponded to the α + β region) showed that their wear resistance and precision of meshing were satisfactory. The depth of diffusion coating on the gear tooth was 0.08-0.10 mm. Thus, alloy VT14 in nitrided form may be recommended as

Card 1/2

L 3006-66

ACC NR: AP5025592

a gear material. Its use will make it possible to reduce nearly in half the weight of reducing gears and to dispense with labor-consuming anticorrosion measures.  
Orig. art. has: 1 figure, 2 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, IE

NO REF Sov: 001

OTHER: 000

Card 212 md

NIKITINA, L.M.; KUCHMEL', M.A.

Coefficient of potential conductivity of filter paper. Teplo- i massoobmena AN  
BSSR 8 no.10:645-646 O '64. (M.RA 18:3)

1. Institut teplo- i massoobmena AN BSSR.

NOVIKOVA, Ye.N.; GUREVICH, S.I.; NIKITINA, I.M.

Using the nitrided VT14 alloy for gear wheels. Metallized. 1  
term.cbr.met. no.10:19-22 0 '65.

(MIR1 18:11)

L 53999-65

ACCESSION NR: AP5017364

UR/0250/64/008/008/0523/0525

AUTHOR: Nikitina, L. M.; Melikhova, A. N.; Shkrabatovskaya, T. F.

7

8

TITLE: Equilibrium moisture content and coefficients of mass transfer of sawdust

SOURCE: AN BSSR. Doklady, v. 8, no. 8, 1964, 523-525

TOPIC TAGS: mass transfer, isothermal transformation, forest product

Abstract: The use of sawdust as a standard in the determination of coefficients of mass transfer by the method of nonsteady-state flux of matter under isothermal conditions has an advantage over filter paper, in that the sawdust can provide better contact with flat rough surfaces, such as construction materials. Pine shavings were investigated: the sorption capacity of the sawdust as a standard material was studied, and it was calibrated according to filter paper. Sulfuric acid was used in concentrations: 82%, 60%, 50%, 40%, 30% and 20% corresponding to air relative humidities of 0%, 16.75%, 36.5%, 56.5%, 74.75%, and 89%. In addition, two of the beakers into which glass weighing bottles with the test materials were lowered were filled with distilled water, corresponding to a relative humidity of 100%. The pine shavings were found to be highly hygroscopic (maximum specific sorption mass content at room temperature 0.3 kg/kg). A comparison of data for the same

Card 1/2

L 53999-65

ACCESSION NR: AP5C17364

specific mass content but different experimental temperatures indicated that the potential of mass transfer and coefficient of potential conductivity increase with increasing temperatures, while the value of the average specific isothermal mass capacity decreases. Orig. art. has 1 graph and 1 table.

ASSOCIATION: Institut teplo-i massoobmena AN BSSR (Institute of Heat and Mass Exchange, AN BSSR)

SUBMITTED: 22Nov63

ENCL: 00

SUB CODE: TD, LS

NO REF SOV: 004

OTHER: 000

JPRS

Joint  
Card 2/2

LYKOV, A.V.; SHEVYL'KOV, V.L., NESTERENKO, A.V., LEBEDEV, P.D.; MAKSIMOV,  
G.A.; NIKITINA, L.M.

Iurii Leonidovich Kavkazov, on his 70th birthday. Izr.-fiz.  
zhur. # no.1:124-125 Ja '65. (MIFPA 18:3)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001137020011-5

GRIGORYEV, V. S., NIKITINA, L. N. and URBANOV, Yu. A.

"Electrodynamic Transducer Based on the Use of Displacement Current in a Dielectric with High Dielectric Permeability."

Paper presented at the 3rd All-Union Conf. on Acoustics, Moscow, 20 May - 2 June 1981.

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001137020011-5"

SOV/136-58-11-9/21

AUTHORS: Zelikman, A.N., Bibikova, V.I., Petrov, V.M.,  
Postnikova, S.V., Abashin, G.I., Pritulo, V.P. and  
Nikitina, L.N.

TITLE: Study of the Behaviour and Recovery of Rhenium in the Roasting  
of Molybdenite Concentrates in a Fluidized-Red Roaster (Izuchenije  
povedeniya i ulavlivaniya reniya pri obzhige molibdenotovykh  
kontsentratov v pechi kipyashchego sloya)

PERIODICAL: Tsvetnyye Metally, 1978, Nr 11, pp 47-52 (USSR)

ABSTRACT: The rhenium concentration in some molybdenite concentrates from  
ores of mainly copper-molybdenum deposits reaches 0.02 - 0.10%  
and these are one of the principle sources of the element. In  
1956 a rare-metals works adopted fluidised roasting, the composition  
of a batch of concentrate being 49.35% Mo, 35.42% S (total), 0.73%  
Ca, 2.98% Fe, 6.95% SiO<sub>2</sub>, 0.88% Cu, -1.12% W, 0.025% Re, 0.033% Se,  
trace of Te, 4.0% H<sub>2</sub>O, 2.2% flotation reagents. The plant has a  
rotary kiln and a fluidised roaster discharging into a common  
electrostatic precipitator. Analysis of samples (table 1) shows  
a 94.8-% distillation of rhenium in the fluidized roaster, compared

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SOV/136-58-11-9/21

Study of the Behaviour and Recovery of Rhenium in the Roasting of Molybdenite Concentrates in a Fluidized-Bed Roaster

with 50% for the rotary kiln but the existing dust-catching system involved 79.5% loss of rhenium in the waste gases. A bubbler (fig.1) installation type VSPU designed by Gintsvermet which could deal with part of the gas was tested and found to be 89-96% efficient with respect to rhenium, most (75-92%) of the quantity trapped being in the form of soluble compounds; the losses of liquid from the bubbler were shown to be due to evaporation rather than mechanical entrainment. Removal of pulp from the bubbler is recommended when pulp acidity becomes 30-60 g/litre and rhenium concentration 0.15 - 0.30 g/litre. The installation is recommended by the authors. The Mintsvetmetzoloto large laboratory fluidized roaster (fig.2) was used to study the behaviour of rhenium and its recovery in the roasting of low-grade molybdenite concentrates (20.5% Mo, 17.5% S (total), 18.31% Si<sub>2</sub>, 4.06% Cu, 1.60% CaO, 7.16% Fe, 0.21% W, 0.01% Re) at 590-630°C and an air velocity in the stack of 8-9 cm/sec (giving an hourly productivity of 75-80 kg/m<sup>2</sup> of hearth area). A materials balance (table 3) for a 12 hour run shows that the method is successful with such concentrates; the distillation of rhenium

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SOV/136-58-11-9/21

Study of the Behaviour and Recovery of Rhenium in the Roasting of Molybdenite Concentrates in a Fluidized-Red Roaster

being 93.2% of the quantity in the concentrate. There are 2 figures and 3 tables.

Card 3/3

NIKITINA, L. N.

~~FASCIER 7-9~~

PHASE I IN OR EXPLORATION 10/1/5981

Symposium on Electronacoustic Transducers. Krynica, 1958

Proceedings of the Symposium on Electronacoustic Transducers (held in) Krynica,  
17-26 September, 1958. Warsaw, Państwowe Wydawnictwo Naukowe, 1961. 442 p.  
Errata slip inserted. 630 copies printed.

Sponsoring Agency: Polish Academy of Sciences. Institute of Basic Technical  
Problems.

Ed. in Chief: Janusz Kacprzak, Doctor of Sciences; Editing Committee: Ignacy  
Malecki, Professor, Doctor of Sciences; Wincenty Pajowski, Doctor; and Jerzy  
Wohr, Master of Sciences; Secretary: Juliusz Mierzejewski.

PURPOSE: This book is intended for physicists and acoustical engineers.

COVERAGE: The book is a collection of detailed research papers constituting the  
proceedings of a conference held in Krynica from 17 to 26 September 1958 under  
the auspices of the Institute of Technical Problems, Polish Academy of Sciences.

Card 1/8

Symposium on Electroacoustic Transducers

POL/6901

The following basic problems are treated: 1) theoretical research on energy transformation processes; 2) experimental development of new types of transducers; 3) design of new types of elements; 4) technology of piezoelectric and magnetostrictive materials; 5) construction of transducers for technical needs; and 6) design of acoustical transducer systems. No personalities are mentioned. References (if any) follow the individual articles.

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Ch. 1. General Problems and Theory of Electroacoustic Transducers	
1. Classification of electromechanical transformation methods in the light of the tasks faced in (sic) the design and construction of electroacoustic equipment. V. S. Grigor'yev	7

Card 2/8

## Symposium on Electroacoustic Transducers

POL'5981

2.	Symbols and models for mechanical systems. L. Cremer	23
3.	Dual forms of four-pole equations and four-pole equivalent circuits of electromechanical transducers. Janusz Kacprowski	33
4.	Equivalent circuits for material-active electromechanical (piezoelectric, electrostrictive, magnetostrictive) transducers in non-quasi stationary vibrations. F. A. Fischer	49
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7.	Four-pole equivalent circuits of piezoelectric bending vibrators. A. Lenk	85
8.	Analysis of the equivalent circuit of the magnetostrictive transducer. Roman Suwalski	93
9.	A method of calculating transients in nonlinear transducers. Jozef Tabin	101
10.	Electrodynamic transducer utilizing displacement currents in dielectrics with high dielectric permeability. V. S. Grigor'yev, L. N. Nikitina, and J. [sic] A. Ukhonov	105

Card 3/8

NIKITINA, L.N.

3/6/1981/000/000/000/000  
DRAFT/ D103

AUTHORS: Zelikman, A. N., Brikova, V. I., Petrov, V. M., Piatnikova, G. Y., Abrosimov, G. I., Fritske, T. P., and Nikitina, L. N.

TITLE: Study of the behavior and recovery of rhenium during the roasting of Kadzhara and Kounrad molybdenite concentrates in a boiling layer

SOURCE: Akademika nauk SSSR. In titut metallurgii im. A. A. Buykova. Institut mineralogii, geokhimii i kristallicheskikh redkikh elementov. Mezhirodovedomstvennye komissii po redkim metallam. Vsesoyuznoye soveshchaniye po probleme rare earth metals. Moscow, 1958. Reprint; trudy soveshchaniya. Moscow, Izd-vo AN SSSR, 1961, 42-50

TEXT: The authors present the results of their study of: (a) the distribution of Re in the products obtained from roasting Kadzhara molybdenite concentrates in a boiling-layer furnace, (b) the recovery of Re from waste gases of a boiling-layer furnace by means

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Study of Re behavior . . .

of a bubbling unit, and the technique of roasting the ore. The method of Koudzha concentrates the metal in the form of a granular mixture of Re with a similar binder, and it is recommended that the extraction of Re with a similar binder be used. A test roasting unit has also suggested for more extensive testing of the process. It is noted that recent research at the Institute of Non-Ferrous Metallurgy (Institute of Non-Ferrous Metallurgy, Moscow) by Dr. M. I. Kelinina (Institute of Non-Ferrous Metallurgy, Moscow) has indicated the advantages of the bubbling unit over the tubular, muffle, and reverberatory furnaces as compared with tubular, muffle, and reverberatory furnaces. Below is illustrated the dust-collection system of the bubbling unit. Below is the bubbling unit designed by the Intelevmet (State Institute of Non-Ferrous Metallurgy) for the recovery of tin from cassiterite. In the laboratory model of the bubbling-layer furnace can get 92% - 96% Re balance in their tests. The distribution in the bubbling layer of Kadzhara concentrated the Re content of bubbler layer, and the Re balance for both the bubbler and the furnace is given in the tables. Conclusion: 1) The roasting of cassiterite in the rates in a bubbling-layer furnace ensured the following separation of Re; 92 - 96% of the Re is sublimated in this type of furnace.

Card 2/3

S 6.07/61 000 [0 47/61 6-1  
b.1.c/b'c]

Study of the behavior ...

as compared with only 40 - 60% in muffle or rotary furnace. 2) In existing bath-silicification system of the rotary furnace does not guarantee a satisfactory degree of extraction, since the loss of metal in white gaseous products is quite high. The lowering of the temperature of the Cottrell filter to 100°C does not reduce this loss on account of the condensation of H<sub>2</sub>Re<sub>4</sub>. 3)

Much better results can be obtained with the bubbling unit and the bubbler's efficiency with respect to Re is stated equal to 95%. 75 - 90% of the metal in the bubbler pulp is in solution, and the concentration of dissolved Re rises as the duration of the bubbling lengthens. It is recommended that the pulp be removed from the bubbler when the Re concen. and acidity of the solution is 0.1% - 0.3 and 30 - 50 g/l respectively. 4) The high degree of Re sublimation (93.2%) from the van of Koundrad concentrate shown that the same technique can also be applied to this material; there is no difference in the behavior of Re during the roasting of both concentrates and the processing of their gaseous products in the bubbling unit. There are 3 figures and 4 tables. [Abstracter's note: p.48 of the photostat copy is illegible.]

Card 3/3

NIKITINA, L.P.

Regional metamorphism of Archean formations in the western part of  
the Khamar-Daban Ridge. Trudy Lab. geol. dokem. no.8:332-352 '59.  
(MIRA 12:10)

(Khamar-Daban ridge--Rocks, Crystalline and metamorphic)

NIKITINA, L. P., Cand Geol-Min Sci -- (diss) "Metamorphism of pre-Cambrian rock in the western part of the Khamar-Daban mountain chain." Leningrad, 1960. 24 pp; (Academy of Sciences USSR, Laboratory of the Geology of the Pre-Cambrian Period); 250 copies; price not given; (KL, 17-60, 144)

MANYULOVA, M.M.; NIKITINA, L.P.

Metamorphism of Pre-Cambrian rocks in the southern Khamar-Daban  
Range and Tunkinskiye Gol'tsy Range. Trudy Lab. geol. dokem.  
no. 11:217-229 '60. (MIRA 14:1)

(Khmar-Daban Range--Metamorphism (Geology))  
(Tunkinskiye Gol'tsy Range--Metamorphism (Geology))

NIKITINA, L.P.

Iron content of ferromagnesian micas in metamorphic rocks. Zap. Vses. min.  
ob-shva 92 no.1:60-66 '63. (MIRA 16:4)

1. Laboratoriya geologii dokembriya AN SSSR, Leningrad.  
(Mica--Analysis)

DZEVANSKIY, Yu.K.; DODIN, A.L.; KONIKOV, A.Z.; KRASNYY, L.I.;  
MAN'KOVSKIY, V.K.; MOSHKIN, V.N.; LYATSKIY, V.B.;  
NIKOL'SKAYA, I.P.; SALCP, L.I.; SALUN, S.A.; RABKIN,  
M.I.; RAVICH, M.G.; POSPELOV, A.G.; NIKOLAYEV, A.A.;  
IL'IN, A.V.; BUZIKOV, I.P.; MASLENNIKOV, V.A.; NEYELOV,  
A.N.; NELITINA, L.P.; NIKOLAYEV, V.A.[deceased]; OBRUCHEV,  
S.V.; SAVEL'YEV, A.A.; SEDVA, I.S.; SUDOVIKOV, N.G.;  
KHIL'TOVA, V.Ya.; NAGIBINA, M.S.; SHEYNMANN, Yu.M.;  
KUZNETSOV, V.A.; KUZNETSOV, YU.A.; BORUKAYEV, R.A.;  
LYAPICHEV, G.F.; NALIVKIN, D.V., glav. red.; VERESHCHAGIN,  
V.N., zam. glav. red.; MENNER, V.V., zam. glav. red.;  
OVECHKIN, N.K., zam. glav. red.[deceased]; SOKOLOV, B.S.,  
red.; SHANTSER, Ye.V., red.; MODZALEVSKAYA, Ye.A., red.;  
CHUGAYEVA, M.N., red.; GROSSGEYM, V.A., red.; KELLEN, B.M.,  
red.; KIPARISCVA, L.D., red.; KOROBKOV, M.A., red.;  
KRASNOV, I.I., red.; KRYMGUL'TS, T.Ya., red.; LIBROVICH,  
L.S., red.; LIKHAREV, B.K., red.; LUPPOV, N.P., red.;  
NIKIFOROVA, O.I., red.; POLKANOV, A.A., red.[deceased];  
RENGARTEN, V.P., red.; STEPANOV, D.L., red.;  
CHERNYSHEVA, N.Ye., red.; SHATSKIY, N.S., red.[deceased];  
EBERZIN, A.G., red.; SMIRNOVA, Z.A., red.izd-va; GUROVA,  
O.A., tekhn. red.

[Stratigraphy of the U.S.S.R. in fourteen volumes. Lower  
Pre-Cambrian] Stratigrafiia SSSR v chetyrnadtsati tomakh.  
Nizhniy Dokembrii. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po geologii i  
okhrane nadr. Pt. 1 (Asiatic part of the USSR) 1963. 396p.

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001137020011-5

BOSTON, MASSACHUSETTS,  
U.S.A.

Basic information concerning the Boston office of the FBI  
is contained in the following document:

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CIA-RDP86-00513R001137020011-5"

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CIA-RDP86-00513R001137020011-5

~~SECRET~~ ~~DEFINITION OF SENSITIVE INFORMATION~~

~~Implementation of the recommendations contained in this document will result in significant damage to the national security of the United States.~~

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R001137020011-5"

MENYALOV, I.A.; NIKITINA, L.P.

Volcanoes of northern Kamchatka in 1962-1963. Biul. vulk.  
sta. no. 37:21-32 '64. (MIRA 18:3)

OBRUCHEV, S.V.; NIKITINA, I.P., MITROFANOV, F.P.; BUZIKOV, I.P.

Basic characteristics of the pre-Cambrian and Lower Paleozoic history of the development of main structural elements in the southeastern part of the eastern Sayan Mountains. Izv. AN SSSR. Ser. geol. 30, no. 171, 1960. (MfA 18:3).

I. laboratoriya geologii dokemuriya AN SSSR, Leningrad.

MORITZ, L. P.

MORITZ, L. P. -- Major General, U.S. Marine Corps, Retired. May 19  
General Officer, USMC, 1945-1968. Commanded 1st Marine Division, 1953-1954.  
Assimilated into the Marine Corps in 1968.

1st Lt., Marine Corps, 1945-1946

NIKITINA, L.P., inzhener.

Determination of the strength of metals subjected to creep  
strain. Trudy TSNIITMASH 45:173-186 '52. (MLRA 9:2)  
(Creep of metals) (Steel--Testing)

NIKITINA, L.P., kandidat tekhnicheskikh nauk.

Mechanism of creep in metals. [Trudy] TSMIITMASH 71:38-56 '55.  
(MLRA 9:8)  
(Creep of metals)

NIKITINA, L.P., kandidat tekhnicheskikh nauk; LEBEDEVA, G.G., inzhener.

Study of the first experimental casting of austenite steel. [Trudy]  
TSNIITMASH 71:122-138 '55. (MLRA 9:8)  
(Steel castings--Testing)

TRUSOV, L.P., kandidat tekhnicheskikh nauk; NIKITINA, L.P., kandidat  
tekhnicheskikh nauk; TULYAKOV, G.A., inzhener.

Causes of crack formation in steam superheater pipes made of the  
EI257 steel. Metalloved.i obr.met. no.5:27-33 My '56. (MLRA 9:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut tekhnologii i  
mashinostroyeniya.  
(Pipe, Steel)

NIKITINA, I.P.

Orderon of Plasticity of Metals in creep. L. P. Nikitina  
Zavodskaya Laboratoriya, 1958, 22, (3), 237-251. (In  
Russian). After a critical discussion of V. B. Ivanova's recently  
published views on the quantitative characterization of the  
high-temperature plasticity of metals, a different approach is  
proposed. It is suggested that the plastic properties should  
be directly taken into account in the determination of creep  
limit. A method developed by the author for the determina-  
tion of creep limit, requiring 1 h and giving errors of 2-5%,  
is described. The need for longer (thousands of hours) and

very long (tens of thousands of hours) experiments is indi-  
cated.—S. K.

(B)  
MT

SOV/124-58-5-6130

Translation from Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 156 (USSR)

AUTHORS Nikitina L.P., Tereshkovich, A.S.

TITLE Austenite Steel Castings for Major Components of Turbines  
(Austenitnaya stal' dlya krupnykh litykh detalei turbin)

PERIODICAL V sb. Ispytaniya i svoystva zharoprochn. materialov. Moscow Mashgiz, 1957. pp 105-129

ABSTRACT The properties of castings are investigated from seven different smeltings of industrial chrome-nickel austenite steels of 15-15-3Co type with small additions of W, Mo, and Ti. The authors have drawn the following deductions: 1) the steel possesses a high degree of strength and ductility at normal and elevated temperatures (up to 750°C); 2) the properties of the steel are sufficiently stable; notch toughness, microstructure, magnetic properties, and phase composition change little in the process of aging at 650°C for a duration of from 4500 to 10,000 hours.

G.A. Tulyakov  
1. Steel castings--Properties    2. Turbines--Materials

Card 1/1

SOV/124-58-1-1379

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p 171 (USSR)

AUTHOR: Nikitina, L. P.

TITLE: The Relationship Between Deformation and Time During the Period of Secondary Creep (Zavisimost' mezhdu deformatsiyey i vremenem vo II periode polzuchesti)

PERIODICAL: V sb.: Ispytaniya i svoystva zharoprochn. materialov. Moscow, Mashgiz, 1957, pp 175-188

ABSTRACT: From an analysis of experimental data the author establishes an analytical relationship between the minimal deformation rate,  $v_{min}$ , and the duration of the period of secondary creep,  $\theta_2$ , in the form of the power function

$$\theta_2 = (v_0/v_{min})^\phi .$$

Here, the exponent  $\phi$  characterizes the stability of the plastic properties of the material during this period of the process. The relationship thus established permits a determination of the ductility margin of the material and either the magnitude of the permissible service

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SOV/124-58-1-1379

'The Relationship Between Deformation and Time During the Period (cont.)

life with a prescribed minimal deformation rate or the permissible deformation rate with a prescribed service life. It was found possible to establish a relationship between  $\theta_2$  with either the stress or the temperature. The relationship between  $v_{min}$  and  $\theta_2$  permits an evaluation of the duration of the period of primary creep [ The context suggests more properly "secondary creep" here; Transl. Ed. Note ] at a prescribed value of the stress on the basis of creep-rupture tests.

I. N. Danilova

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SOV/124-58-4-4877

Translation from: Referativnyy zhurnal Mekhanika, 1958, Nr 4, p 166 (USSR)

AUTHOR: Nikitina, L. P.

TITLE: Determination of Yield Strength of Material With Consideration of Its Plastic Properties (Oprudeleniye predela polzuchestis uchetom plasticheskikh svoystv materiala)

PERIODICAL: V sb.: Ispytaniya i svoystva zharoprochn. materialov.  
Moscow, Mashgiz, 1957, pp 189-197

ABSTRACT: A method of determining the yield strength of a material with consideration of its plastic properties is proposed. This method is based on utilizing in the calculation the structurally allowable deformation of the component for the first two cycles of yield of the material. According to the author the proposed yield strength value  $\sigma_y$  makes it possible to utilize more fully the strength of the material, excluding at the same time the possibility of the failure of the component due to complete depletion of its plasticity margin. Samples of  $\sigma_y$  determination for some high-temperature materials are given 1. Materials--Mechanical properties  
2. Mathematics

Card 1/1

Yu. G. Maksimov

YAROVINSKIY, L.M., kand.tekhn.nauk; KARSKIY, N.Ye., kand.tekhn.nauk;  
NIKITINA, L.P., kand.tekhn.nauk

Cast perlite steels for power units operating at tempera-  
tures of 540° and 570°. [Trudy] TSNIITMASH 100:119-161  
'59.  
(Heat-resistant alloys)

24 4200 1327 2800  
18 8200 2804, 1513 24 31

S 1327 2800  
S 24 31

AUTHOR: Wolff, G. L.

TITLE: A Self-Instructional Program

PERIODICAL: Behavior Research and Therapy

TEXT: The object of this self-instructional manual is to teach the initial performance of progressive relaxation. This form of relaxation is well known as a technique for reducing tension and promoting relaxation. The manual consists of two parts. Part I contains information at the start of the manual on the technique of progressive relaxation; it ends with a section on how to evaluate your progress by introducing a self-assessment scale. Part II contains a series of relaxation exercises.

DESCRIPTION: This manual is designed to help you learn how to relax.

INTRODUCTION: This manual will teach you how to relax.

information at the start of the manual on the technique of progressive relaxation. The manual consists of two parts. Part I contains information at the start of the manual on the technique of progressive relaxation; it ends with a section on how to evaluate your progress by introducing a self-assessment scale. Part II contains a series of relaxation exercises.

Accurate formulation is ...

and the previous relaxation studies were conducted by the previous Relaxation Test Program. In these studies relaxation with a constant load was studied at various deformations. The relaxation test was conducted on a machine order testpiece 11.5" long with a gauge length of 4" diameter of 1/2 and a tolerance of 1/16. The maximum load the machine was able to support was 1000 lbs. The initial stress was below 13%  $\sigma_0$  being 1000 lbs divided by the cross-sectional area of 1.56 in<sup>2</sup>. The specimen was loaded to 1000 lbs and held constant for 10 minutes. This was upon the relaxation of the specimen. The relaxation was measured (3) to an initial strain of 0.1% in each case. The initial deformation which it will undergo is calculated. It is found that three different testseries were carried out. The first type of test (A141) had a tensile load of 1000 lbs, a gauge length of chrome-nickel steel tube 1/2" dia. and a gauge length of 4". The stability at different initial strains is determined.

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Accurate formulation of ...

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(b) the relaxation stability with a constant elastic component of the initial deformation ( $\epsilon_e = \text{const}$  at  $\epsilon_0 = \text{const}$ ) and with a different plastic component ( $\epsilon_{pl} = \text{var}$ ), and (c) the relaxation stability at different initial stress ( $\epsilon_0 = \text{var}$ ;  $\epsilon_e = \text{var}$ ) but constant total deformation ( $\epsilon_0^{\text{sum}} = \text{const}$ ).

Tables 2 and 3 give part of the experimental results obtained by evaluating the primary relaxation curves. The plastic deformation of the material before the relaxation  $\epsilon_{pl}$ , which may also be a previous plastic deformation  $\epsilon_{\text{prev}}$  of various origins, greatly affects the relaxation process; therefore,  $\epsilon_e + \epsilon_{\text{rel}} = C - (\epsilon_{pl} + \epsilon_{\text{prev}})$  (4), and  $(\epsilon_e + \epsilon_{pl} + \epsilon_{\text{prev}}) + \epsilon_{\text{rel}} = C$  (4a), where  $\epsilon_e + \epsilon_{pl} + \epsilon_{\text{prev}} = \epsilon_0^{\text{sum}} - \epsilon_0^{\text{sum}}$  may also be determined experimentally; for the materials investigated at the temperatures considered, it is about 0.3 - 0.5%. The practical experience saying that bolts should be initially stressed to 0.15% is theoretically confirmed by the inflection point of the curve  $\sigma - \epsilon$  (Fig. 3). There are 3 figures,

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3 tables, and 7 references: 5 Soviet-bloc and 2 non-Soviet-bloc. The two references to English-language publications read as follows: J.H.M. Draper. The Metropolitan Vickers Gazette, v. XXVII, No. 439, p. 60, Febr. (1956); S.J. Watson. The Metropolitan Vickers Gazette, v. XXVII, No. 439, p. 63, Febr. (1956). . .

ASSOCIATION: Tsentral'nyy koteloturbinnyy institut im. I.I. Polzunova  
(Central Boiler and Turbine Institute imeni I.I. Polzunov)

Температура в град. С °С	$\sigma_0$ кг/мм <sup>2</sup>	Нагружение $F_{сум}$ кг/мм <sup>2</sup>	ТАБЛИЦА 2 Начальная деформация, %			Остаточное напряжение $\sigma_t$ , кг/мм <sup>2</sup> за время, час.	Конечные та- чи кризиса релаксации			$\Delta(\frac{\sigma}{\sigma_0})$ кг/мм <sup>2</sup>	Примечание	
			VIII)	IX)	X)		10	100	1000			
			$\epsilon_y$	$\epsilon_{pl}$	$\epsilon_{пред}$		10	100	3000			
1	2	3	4	5	6	7	8	9	10	11	12	13
												14
<i>Сталь марки ЭИ415</i>												
500	20	I	0,113	0,111	0,002	0	15,5	14,2	12,5	—	1075	12,6
	30	I	0,168	0,167	0,001	0	21,0	19,2	17,5	16,7	4525	16,61
		II	0,256	0,167	0,044	0,045	24,1	22,5	—	—	238	22,1
		I	0,192	0,167	0,025	0	22,3	20,2	17,9	(16,8) (21)	1569	17,8
		II	0,283	0,167	0,023	0,093	24,5	23,2	21,8	—	2179	21,3
	40	I	0,311	0,222	0,089	0	26,2	23,0	20,0	18,2	3141	18,1

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ACCESSION NR: AT4007045

S/2598/63/000/010/0224/0233

AUTHOR: Nikitina, L. P.

TITLE: Temperature dependence of mechanical properties and heat resistance of AT-3 titanium alloy

SOURCE: AN SSSR. Institut metallurgii. Titan i yego splavy\*, no. 10, 1963.  
Issledovaniya titanovykh splavov, 224-233

TOPIC TAGS: titanium alloy, AT-3 titanium alloy, AT-3 titanium alloy property, AT-3 alloy heat resistance, complex titanium alloy, titanium aluminum chromium alloy, iron containing alloy, silicon containing alloy, boron containing alloy

ABSTRACT: Tests were conducted to evaluate the mechanical properties and the high temperature strength of titanium alloy AT-3, at temperatures ranging from 20 to 400C. Rod-shaped specimens (diameter 14 or 20 mm) were tempered at 800-900C for 0.5 to 1.0 hrs., then air cooled. The test involved tensile strength (see Table 1 in the Enclosure), impact toughness (see Fig. 1 in the Enclosure), deformability (see Fig. 2 in the Enclosure), sensitivity to stress concentration points (see Fig. 3 in the Enclosure), resistance to creep (see Fig. 4 in the Enclosure), tensile strength and the effect of alloy aging (100 hrs. at 300-600C, 0-4000 hrs. at 350C, 100-3000 hrs. at 400C). Detailed tables of results are included. The author concludes that AT-3 has greater strength than other known Ti -alloys.

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ACCESSION NR: AT4007045

The alloy is suitable for extended operations (500 to 10,000 hours) under stress and at temperatures up to 400C. Higher temperatures produce a substantial decrease in tensile strength, and reduce plasticity and impact strength. The effect of technological factors (i.e. plastic deformation during rolling, forging, intermediate heat treating) remains to be clarified. Part of the work was done by A. A. Chizhik. Orig. art. has: 7 tables, 6 graphs.

ASSOCIATION: Institut metallurgii im. A. A. Baykova AN SSSR (Institut of Metallurgy); Tsentral'nyy kotlo-turbinnyy institut im. Polzunova (Central Boiler and Turbine Institute)

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NO REF SOV: 002

OTHER: 000

2/7

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NIKITINA, L.P.

Durability of materials under stress relaxation. Zav.lat. 29  
no.11:1344-1347 '63. (MIRA 16:12)

1. Tsentral'nyy nauchno-issledovatel'skiy kotloturbinnyy institut  
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